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REMARKS

Claims 1-108 are currently pending, and claims 12-95 are presently under consideration. Independent claims 12, 16, 18, 27, 29, 30, 38, 44, 53, 58, 67, 69, 71-74, 81, 86, 88 and 92 have been amended herein. A version of all pending claims can be found at pages 2-18. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 12-95 Under 35 U.S.C. §102(e)

Claims 12-95 stand rejected under 35 U.S.C. §102(e) as being anticipated by Kravets *et al.* (US 6,363,377 B1). Withdrawal of this rejection is respectfully requested for at least the following reasons. Kravets *et al.* neither discloses nor suggests each and every feature of applicants' invention as recited in the subject claims.

For a prior art reference to anticipate, 35 U.S.C. § 102 requires that "*each and every element* as set forth in the claim is found, either expressly or inherently, described, in a single prior art reference." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (quoting *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Independent claims 12, 18, 27, 29, 30, 38, 44, 53, 58, 67, 71-74, 81, 86, 88 and 92 relate to an invention that provides enhanced query results based at least in part upon a *user model*. Such *user model* can be employed to specify various parameters relating to terminology highlighting and re-ranking of query results. In addition, the subject invention can be utilized to generate relevancy of query results based upon a computer user's interest. Thus, the claimed invention employs a *user model* which enhances query results so that obtained results are tailored to a particular user's needs and serves as a context for the analysis of such results. Kravets does not teach or suggest such limitations of the subject invention as recited in the subject claims.

More particularly, Kravets does not teach or suggest enhancing query results by utilizing a *model of the user's information need* as the user accesses a document. The Examiner in the Office Action dated September 16, 2003, relies on Kravets, col. 11, lines 63-

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65 and col. 9 lines 52-64 to teach this limitation. However, the sections referenced disclose "when the user generates a query, the browser generates a number of related queries and sends all the queries to the search engine in parallel." Also, Kravets discloses using a "few natural ways" to restrict or relax the original query entered by the user. These methods include locating specified query text in a certain location in a document (e.g. title) to further restrict a user query or locating query text anywhere in the document to broaden the user query to include more results. Thus, Kravets discloses the ability to vary a user query based on location within text. This type of query modification is merely a slight variant to the original user query and does not involve the employment of a *user model* as recited in the subject claims.

Such *user model* can be employed to serve as the basis for various document analyses such as descriptions of queries, a user specified 'profile of interest', augmented versions of such descriptions created by the highlighting facility created based on further linguistic and/or semantic analysis or additional information that the highlighting facility *may collect or infer* about the user's current task. (See App. page 4, lines 22-27). This *user model* interest serves as a *context* for the *analysis* of the accessed or pre-fetched documents. (See App. page 4, lines 29-31). Kravets does not teach or suggest such aspects of the claimed invention.

Instead, Kravets discloses a method of enhancing query results utilizing a clustering technique such as hashing. (See col. 4, lines 50-57). Kravets is simply a tool for enhancing query results using a clustering technique based upon search terms. (See Abstract, lines 3-9). Kravets does not teach or suggest query enhancing *based at least in part upon a user model* as in the subject claimed invention.

In addition, there is no motivation or suggestion to utilize a user model in conjunction with the invention as recited in the subject claims. As described *supra*, Kravets discloses "tools to aid a *user* to automatically reformulate a query" (See Abstract, lines 4-5) and a results organizer which "aid the *user*...in understanding and visualizing a large number of matching documents returned in response to a search query by clustering like items from the search." (See Abstract, lines 14-16). Thus, the search techniques disclosed in Kravets provide for a *user* to proactively modify queries employed with a search engine. There is no suggestion or motivation to employ a user model that utilizes a user's past activities and/or

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current tasks to create a context in which to facilitate a query.

Furthermore, Kravets *et al.* does not teach or suggest allowing a *user to specify* various parameters related to *terminology highlighting*, as recited in the subject claims. For example, the user may prefer to have terminology from the original description of the information need highlighted in one color while all the synonyms in some other color. (See App. p.13, lines 10-13). In another example, the user may only want only the occurrence of multi-word phrases from the request highlighted in the document, *etc.* (See App. p.13, lines 13-14). Kravets *et al.* is silent regarding *user-specified terminology highlighting* and thus does not teach or suggest such a limitation as recited in the subject claims.

In addition, *via* employment of a user model in applicants' invention, two unique users can search on identical criteria, but receive different query results because each user's model will enhance query results so that the results per user are tailored to their respective needs. In contrast, the system of Kravets would generate same query results to two different users employing identical search terms at the same time because query results are not enhanced based upon characteristics unique to each user (as expressed for example *via* a user model in applicants' invention). Kravets does not teach or suggest employment of a *user model* representation to allow for personalization of query results as in applicants' invention.

Moreover, regarding ranking of query results, Kravets ranks documents returned by a search engine, and such rankings are based upon the aforementioned clustering techniques. The clustering techniques focus upon key words and/or search terms used for the query as compared to employment of a user model as in the subject claimed invention. Within Kravets, "the set of keywords from the search query are used to rank the documents returned by the search engine." (See col. 7, lines 38-40). In contrast, applicants' claimed invention creates a model of the user's information need independent of a manner in which the information need is expressed (*e.g.*, search terms). The subject invention re-ranks query results *based at least upon a user model* - such user model can be created by monitoring user actions, specifically typing within a query box, specifying tasks and intentions, and/or receiving a detailed description from the user. (See App. p. 11, lines 2-19). Thus, there is no motivation to implement this aspect of the claimed invention and Kravets does not teach or suggest *re-ranking query results based at least upon a user model*.

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Independent claims 16 and 69 recite “*creating a context based on a computer user’s interests*” and then “*generating information regarding relevancy of the query results independent of the search engine and based upon the context.*” Kravets does not teach or suggest such claimed features of applicants’ invention. Although Kravets allows a user to receive query results and approve or disapprove of each clustered search, the user manually submitting a “vote” is not a computer implemented method that *creates a context based on a computer user’s interest* let alone *generating information regarding relevancy of query results... based upon the context* as in the subject claimed invention. Rather, Kravets merely discloses and teaches a voting system, allowing the user to manually filter wanted and/or unwanted clusters of information. Thus, Kravets does not teach such aspects of the subject invention as disclosed in the subject invention. Moreover, since Kravets relies on a user implemented voting system, there is no suggestion or motivation to modify a user query based upon a context of a user’s activities and current tasks as recited in the subject claims.

In view of at least the foregoing, it is readily apparent that Kravets does not teach or suggest the subject invention as recited in independent claims 12, 16, 18, 27, 29, 30, 38, 44, 53, 58, 67, 69, 71-74, 81, 86, 88 and 92 (and claims 13-15, 17, 19-26, 28, 31-37, 39-43, 45-52, 54-57, 59-66, 68, 70, 75-80, 82-85, 87, 89-91, and 93-95 which respectively depend therefrom). This rejection should be withdrawn.

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**II. Conclusion**

The present application is believed to be condition for allowance in view of the above amendments and comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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